

Remarks

Reexamination and reconsideration of this application, as amended, is requested. Claims 1, 5 - 8, 16, 22 and 25 have been amended and claims 1 -25 remain in the application as originally filed.

Response to the - 35 USC § 112

Claim 22 was amended to delete "counters" and add "registers" further to the Examiners suggestion to remedy the lack of antecedent basis. Therefore, Applicant submits that this objection has been rendered moot.

Response to the - 35 USC § 102(a)

Claims 1-4, 11, 16-17, and 24 were rejected under 35 U.S.C. 102(a) as being anticipated by Chang (6754506). Claims 1, 16 and 25 have been amended to include the following language:

"using open loop or closed loop power control to. . ."

The present invention provides the capability to use either an open loop or closed loop to enable power control. It may operate in a closed loop in that the receiver decides when the power level needs to be adjusted and instructs the transmitter accordingly. In other words, the power control "intelligence" is in the receiver. Further, the present invention provides the capability to use an open loop, which allows a transmitter to unilaterally manage power based on the packet error rate. If both the transmitter and receiver are equipped for packet error-based power control, either open loop or closed loop control may be available. Regardless of the method used, as

claimed, the present invention provides for the capability of power control to reside in either the transmitter or receiver.

In contrast, the open loop as defined by Chang merely provides that the mobile unit measures the level at which a transmission signal from the base station is received and compares that level to the level the base station transmitted the signal at (which is known) to derive an estimate of the path signal loss. The mobile unit then adjusts its own transmission level appropriately based on the assumption that its transmitted signal will experience the same path loss to the base station. Said another way, in the open loop of Chang, power control is in the mobile unit and in the open loop of the present invention, power control resides in the transmitter (i.e., base station).

Chang defines the closed loop power control as comprising the base station determining the actual received signal strength from each mobile unit and instructing each mobile unit to increase or decrease its transmission power accordingly. In open loop power control, the mobile unit measures the level at which a transmission signal from the base station is received and compares that level to the level the base station transmitted the signal at (which is known) to derive an estimate of the path signal loss, The mobile unit then adjusts it's own transmission level appropriately based on the assumption that its transmitted signal will experience the same path loss to the base station.

Thus, although Chang and the present invention both appear to use the terminology "open loop" and "closed loop", the definition in each is distinct. For example and not by way of limitation, the open loop of the present invention enables the transmitter (i.e., base station) to unilaterally modify the power based on packet errors.

However, the open loop of Chang provides "The mobile unit adjusts its own transmission level appropriately".

Further, as defined by Chang, the closed loop power control comprises the base station determining the actual received signal to noise ratio (SNR) from each mobile unit and instructing each mobile unit to increase or decrease its transmission power accordingly. However, in the closed loop as defined in the present invention the power control "intelligence" is in the receiver.

As the newly amended claims require "using open loop or closed loop power control" and the definitions of "open loop" and "closed loop" in the present invention are distinct from Chang, Applicant submits the 102(a) rejection of Claims 1-4, 11, 16-17, and 24 has been traversed.

Response to the - 35 USC § 103(a)

Claims 5-9 and 18-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Van Heeswyk (6765883), in further view of Honkanen (6765883).

Applicant submits with claims 1, 16 and 25 newly amended, for at least the reasons set forth above, these dependent claim rejections have been traversed.

Conclusion

Applicant believes that the foregoing is a full and complete response to the Office Action mailed 25 August 2004, and it is submitted that claims 1 – 25 are in condition for allowance.

Should it be determined that an additional fee is due under 37 CFR §§1.16 or 1.17, or any excess fee has been received, please charge that fee or credit the amount of overcharge to deposit account number 02-2666.

If the Examiner believes that there are any informalities which can be corrected by an Examiner's amendment, a telephone call to the undersigned at (503) 439-8778 is respectfully solicited.

Respectfully submitted,



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